



# NEM FINANCIAL RESILIENCE REVIEW

20 December 2013

Mr John Pierce  
Chairman  
Australian Energy Market Commission  
PO Box A2449  
SYDNEY SOUTH NSW 1235

Dear Mr Pierce

### **NEM FINANCIAL RESILIENCE REVIEW – STAGE TWO**

Macquarie Generation welcomes the opportunity to comment on the AEMC's *NEM Financial Resilience Review - Stage Two Options Paper*, released publicly on 8 November 2013.

Macquarie Generation has concerns that the AEMC has not established a robust framework for assessing whether financial contagion is a potential problem for the NEM or for conducting any empirical test to quantify the likelihood of any financial instability in the electricity sector. The following submission attempts to describe some of the reasons why we consider that the NEM is unlike other markets that have experienced problems with systemic business failure. We observe that the AEMC has focussed solely on OTC derivatives in its analysis of the NEM, as per its terms of reference. In our experience, OTC derivatives have played a crucial role in the NEM, allowing businesses to efficiently and flexibly manage a range of market risks. The AEMC must be careful not to recommend unnecessary restrictions or costs on the OTC market that would inhibit the use of this vital risk management tool.

### **Why financial instability in the NEM is less likely than in traditional financial markets**

This second stage of the financial resilience review is driven in part by Australia's G20 commitments to apply certain policies to various OTC derivatives given systemic risk problems identified in financial markets during the global financial crisis of 2009. As a starting point, Macquarie Generation considers that it is useful to contrast some of the underlying causes of systemic risk in traditional financial markets against some of the competing characteristics of a standalone domestic market like the NEM dominated by natural market players with largely offsetting market risk positions.

1. *Asset valuation risk*: A large proportion of the assets and liabilities of financial institutions are made up of intangible financial instruments and contractual arrangements. Some of them are difficult to value and some of them can be opaque or complex. In a time of crisis, it is not easy to distinguish whether a financial institution is holding "good" or "bad" obligations and positions. As a

result, prudence and self-interest may dictate a halt to activities, which can spread to form financial contagion.

In the electricity market, major natural participants are backed by real tangible assets in the form of power stations and customer contracts. These tangible assets produce readily identifiable cash flows that create confidence that counterparties will be able to meet financial obligations. A shock collapse of one participant is less likely to affect a second participant since the second participant will have a cushion of security of cash flows from its own generation unit or customer base. A third participant, with full knowledge of the tangible assets of the second participant, is less likely to halt financial activities with the second participant merely because the first participant has collapsed. This makes contagion less likely.

2. *Leverage:* Financial institutions such as banks are highly leveraged entities. Asset quality impairment can lead to large losses and affects solvency in two ways. Firstly the future cash flows are expected to be lower. Secondly, the trading value of the impaired asset is lower (assuming the asset is usually tradable). In contrast, electricity wholesalers and retailers are not as highly leveraged as banks. Where asset impairments occur, they are often non-cash valuation adjustments which usually reflect lower future earnings and cash flows. The effect on solvency is muted.
3. *Contingent liabilities:* Insolvency in banks and insurance companies can occur from unexpected exposure to off-balance sheet or contingent liabilities. Major participants in the electricity market are usually not in the business of creating off-balance sheet or contingent liabilities. This means the electricity market is less likely to be exposed to this sort of instability.
4. *Diversification:* Financial and trade linkages are known to be an important determinant in financial contagion. Similarly, in the electricity market, major participants may be inexorably entwined with each other in electricity contracts. However many major participants also have businesses in industries (e.g. gas, coal, oil, renewables) that are not directly correlated with the NEM.

Some participants are also part of a multinational energy company. These firms would treat the NEM as one business division in their portfolio of interests. Their diversified earnings stream provides a financial buttress that should be able to withstand shocks emanating from the NEM. In other words, it is unlikely that these large firms will collapse merely because one of their business divisions was performing poorly. This means market participants can deal confidently with these diversified entities even when another participant is insolvent. Where one of these large firms be insolvent itself, again this does not necessarily lead to contagion since it is more likely that the lenders of that firm will merely become the new owners of the business.

5. *Last resort arrangements:* The AEMC's Stage One review examined retailer of last resort arrangements in the NEM and identified possible weaknesses in an

extreme case if a large retailer became insolvent during a crisis period in the market. The AEMC is currently looking at options to improve ROLR arrangements in this regard. The ROLR rules do allow the transfer of valuable cash producing assets (i.e. customer contracts) to another market participant. It is unlikely that this would systematically weaken the electricity market or impact on the physical supply of power to any customer.

Where insolvency occurs in a major electricity generator, the lenders will generally gain control of the assets. There will be an incentive for the administrator or bank to continue to operate the business as per usual to generate earnings and recover debts owed.

A lender of last resort in a banking industry is in a more precarious and complex situation as it struggles to deal with lending to weakened institutions, discouraging future moral hazard, preventing capital flight, limiting banking runs, maintaining investor credibility and macro-economic stability. In some cases the owner of last resort of a financial institution is a government that may or may not decide to conduct a rescue. This results in a system-wide fragility in financial markets as participants are left guessing which financial institution will survive.

### **Market risk far outweighs credit risk**

The AEMC's options paper provides a good overview of the various business risks that electricity market participants face on a day-to-day basis and the internal risk management processes and tools that businesses apply to measure and moderate these risks. However, as a general comment we do not believe that the AEMC has adequately described the importance of OTC derivatives for managing market risk in the bigger picture of how the NEM operates. In our view, market risk dominates the narrower risks posed by the default of OTC counterparties.

As a standalone generation business, Macquarie Generation is constantly making the trade-off between locking in forward contracts to guarantee a certain level of return, assessing potential spot market conditions and managing planned and unplanned plant outages. As market conditions change, our contracting strategy will change as we endeavour to maximise returns. Having a liquid OTC derivatives market is central to being able to quickly respond to emerging opportunities and risks. In addition, contract tailoring allows generators and retailers to devise innovative contract terms that more efficiently manage market risk, with consequent benefits for customers.

Macquarie Generation acknowledges that this review was initiated partly in response to broader G20 obligations at the Federal level. However, a review that focuses on credit risk and the scope for systemic failure across the NEM must give considerable weight to the broader role played by OTC derivatives in managing the underlying market exposure of NEM participants, which at times of the market price cap has the potential to damage business solvency in a period of hours. Any policy recommendation that places restrictions, obligations or costs on the use of OTC derivatives must pass a high hurdle, with a clear demonstration that the benefits of the change will not unnecessarily restrict good commercial decision making in the OTC market.

### **Cash flow risk – OTC derivatives versus exchange traded margining**

Macquarie Generation is of the view that the AEMC has underplayed the important role that OTC contracting has in moderating cash flow risk in the NEM.

Over the past decade, one of the most challenging financial periods that Macquarie Generation has faced was the drought year of 2007 – a time of very high spot and contract prices. As a standalone generation business, we were earning excellent returns in the spot market but facing huge margin calls on our contracts with the ASX futures exchange. As the price of all futures contracts increased to new highs, our daily margin calls created problems in accessing substantial funds at such short notice. While the underlying financial health of the business had never been stronger, the requirement to pay escalating margin payments was creating short-term financial risk of another kind. The AEMC's options paper provides little discussion of this risk factor in the NEM.

One of the advantages of using OTC contracts is that they limit the exposure of each counterparty to cash flow risk. The OTC market provides participants with flexibility on credit arrangements, which allows for tailored, and generally less onerous requirements, than for exchange-traded contracts.

Macquarie Generation has a well-established policy and process for assessing and monitoring the creditworthiness of OTC counterparties. Where a counterparty does not meet specific criteria or sit within existing limits, Macquarie Generation may require credit support in the form of a bank or parent guarantee, credit default swap or standby letter of credit. Such an approach provides the flexibility to negotiate OTC contracts that benefit both parties with a known degree of protection against default risk.

Macquarie Generation is strongly opposed to any option that involves the central clearing of all OTC derivatives. Firstly, it would require a degree of standardisation of contracts that would limit the ability of well-informed traders to design contracts that are mutually beneficial. Secondly, it would require a degree of collateralisation, tying up cash reserves in the process.

For natural players in the OTC market, who conduct the majority of trades, the intention is generally to take contracts through to settlement. They can sign OTC contracts knowing that the terms of the contract, backed by the ISDA provisions, do not require any calls on limited capital reserves in the interim.

### **Potential options to reduce systemic risk**

Macquarie Generation has not commented on the AEMC's proposed options at this stage as we are of the view that AEMC has not established any failing or weakness in the current arrangements. Macquarie Generation endorses the detailed assessment and critique of each of the options in the National Generators Forum submission to this review.

Given that it is part of the G20 provisions, we offer the following comments on some of the limits of the proposal to mandate OTC reporting to a central trade repository:

- A standard reporting format will not be able to adequately capture the tailored, contingent or complex terms in many OTC contracts. If the reporting only includes specific terms such as aggregate volume, start and end date, and average prices, the data will not accurately reflect that entities OTC contract position. Requiring entities to only report their standard OTC contracts would not show their true position. Incomplete trade reporting will misrepresent the market and credit risk exposures of an OTC contract position for its holder. We would also question the ability of any regulator to keep track and make sense of this data during a period of market volatility as businesses adjust their contract positions.
- Any publication of OTC contract data raises a host of concerns. Publishing aggregate data is likely to be misleading as it is not possible to capture the terms of more complex contracts. This could lead to commercial gain or disadvantage depending on the circumstances. Some businesses may deliberately structure deals specifying terms in OTC contracts to paint a false picture to other participants. In this case we would have a regulatory tool influencing market outcomes without delivering any underlying benefit.
- Transparency is not as vital in electricity financial markets since contagion in the sector is unlikely to spread significantly beyond the NEM should it occur. Instability is unlikely to have wider implications for the broader macroeconomy since the system operator or government can intervene to direct physical assets to continue operating as per normal. This form of intervention is not available in other financial markets. For this reason, transparency is vital for promoting macroeconomic and market stability in other financial markets.

### Summary

Macquarie Generation would encourage the AEMC to give careful consideration to whether the circumstances could arise which would lead to financial contagion in the NEM before recommending any policy action. In our view, the OTC derivative market is one of the main reasons that the NEM has worked so effectively and efficiently for so long. A review process that obliges AEMC to focus on credit risk in the NEM must give sufficient weight and recognition to the important role played by OTC derivatives in managing market risk.

Yours sincerely



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